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## Patent Abstracts of Japan

PUBLICATION NUMBER : 11117915  
PUBLICATION DATE : 27-04-99

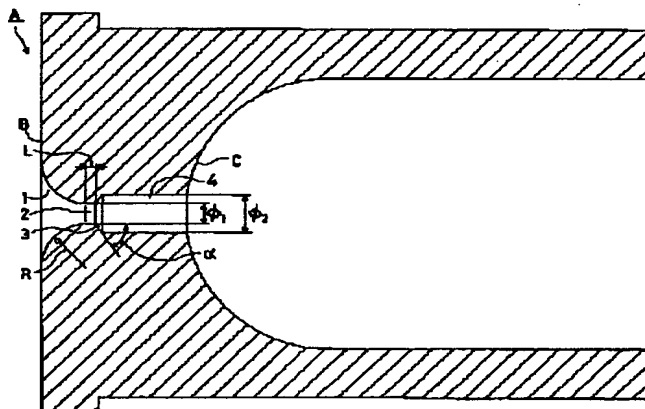
APPLICATION DATE : 27-08-97  
APPLICATION NUMBER : 09230160

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INT.CL. : F15D 1/08 B23P 15/00

TITLE : ORIFICE FOR PRESSURE TYPE FLOW  
CONTROL DEVICE AND  
MANUFACTURE THEREOF



ABSTRACT : PROBLEM TO BE SOLVED: To attain pressure flow control of high accuracy by providing an inlet tapered part, a short throttle parallel part, a short tapered part and a parallel diameter-enlarged part continuously in this order.

SOLUTION: An orifice for a pressure type flow control device is composed of an orifice A, an inlet tapered part 1, a throttle parallel part 2, a tapered diameter-enlarged part 3 and a parallel diameter-enlarged part 4. As a concrete example, it is confirmed that linearity between a flow rate and primary pressure  $P_1$  is ensured over a range of the flow characteristic  $P_2/P_1$  of the orifice (a parallel diameter-enlarged part inner diameter ( $\phi_2=0.2$  mm) A being  $P_2/P_1=0.633$  ( $P_1=3.0$  kgf/cm<sup>2</sup> abs,  $P_2=1.89$  kgf/cm<sup>2</sup> abs), that is, in spite of a form of the orifice A based on machining of only deburring by an R-cutting tool, a drill and a center drill, the linear characteristic of any orifice A is held to a point of  $P_2/P_1=0.633$  so as to attain flow control of high accuracy.

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